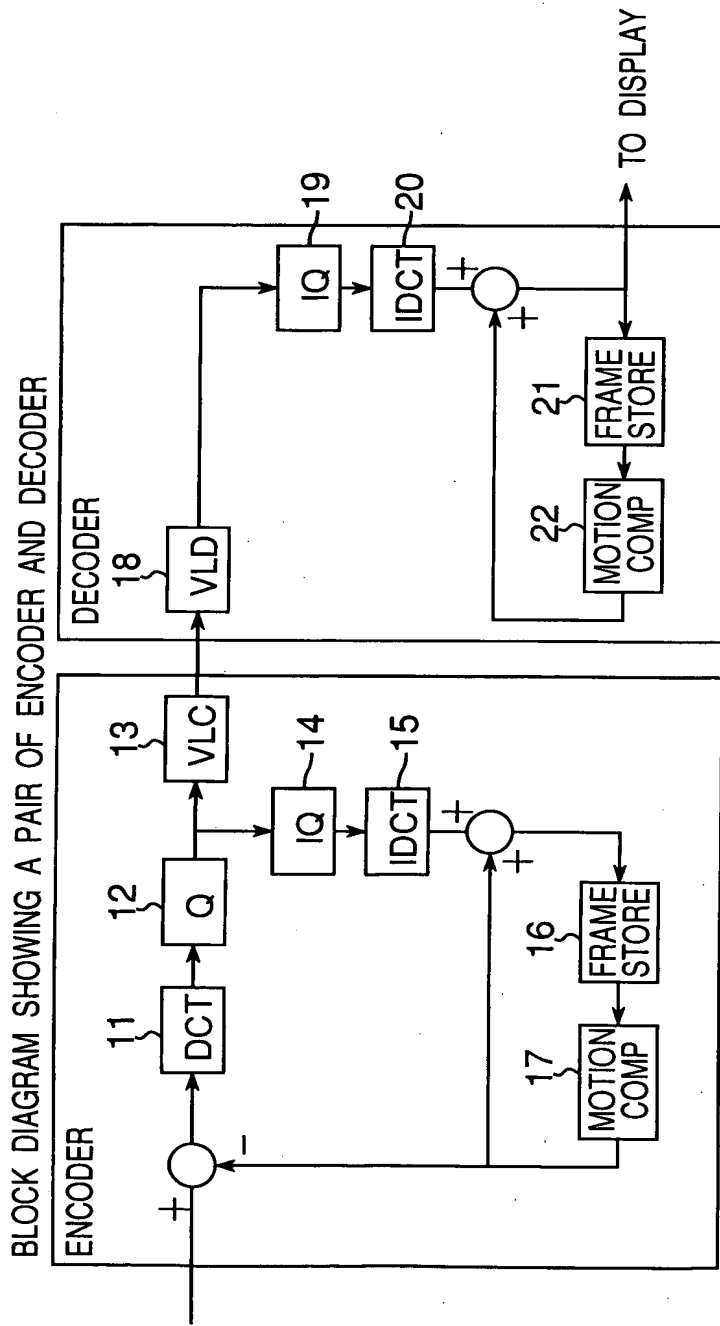


Fig.1

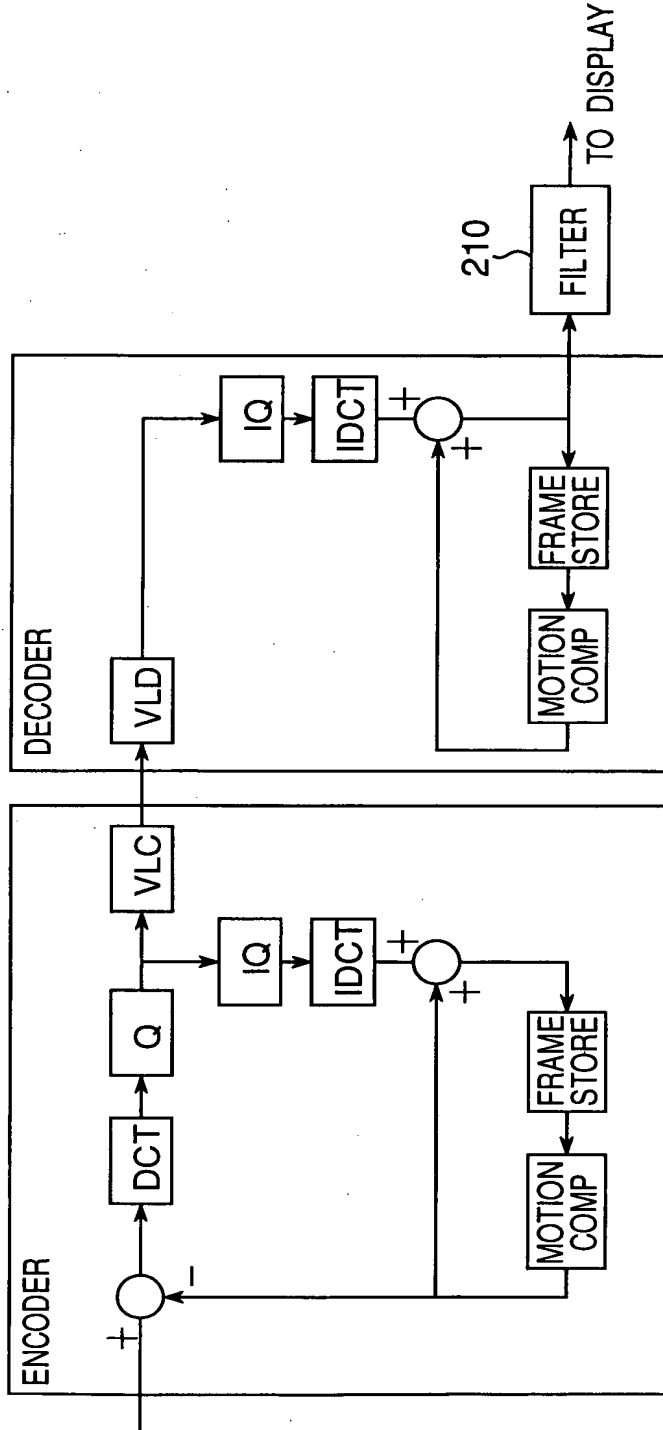


LEGEND:

- |             |  |      |                                     |
|-------------|--|------|-------------------------------------|
| DCT         | - BLOCK BASED DISCRETE COSINE TRANSFORM      | VLD  | - VARIABLE LENGTH DECODING          |
| Q           | - QUANTIZATION                               | IQ   | - INVERSE QUANTIZATION              |
| VLC         | - VARIABLE LENGTH CODING                     | IDCT | - INVERSE DISCRETE COSINE TRANSFORM |
| FRAME STORE | - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE |      |                                     |
| MOTION COMP | - MOTION COMPENSATION MODULE                 |      |                                     |

Fig.2

BLOCK DIAGRAM SHOWING THE LOCATION OF THE FILTER  
AS A POST FILTER FOR MOVING PICTURES.

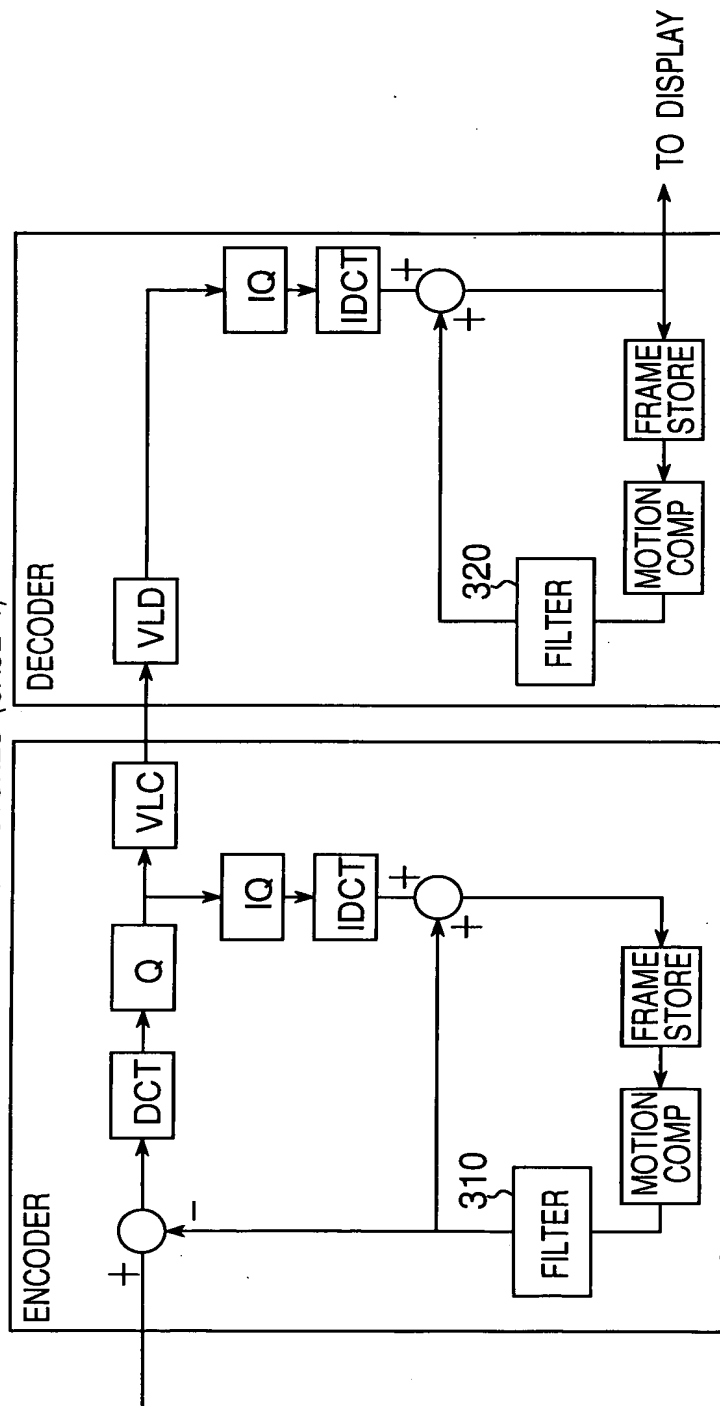


LEGEND :

- |             |  |        |                                     |
|-------------|--|--------|-------------------------------------|
| DCT         | - BLOCK BASED DISCRETE COSINE TRANSFORM      | VLD    | - VARIABLE LENGTH DECODING          |
| Q           | - QUANTIZATION                               | IQ     | - INVERSE QUANTIZATION              |
| VLC         | - VARIABLE LENGTH CODING                     | IDCT   | - INVERSE DISCRETE COSINE TRANSFORM |
| FRAME STORE | - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE | FILTER | - BLOCKY NOISE REMOVAL              |
| MOTION COMP | - MOTION COMPENSATION MODULE                 |        |                                     |

**Fig.3**

BLOCK DIAGRAM SHOWING THE LOCATION OF THE FILTER  
AS A LOOP FILTER FOR MOVING PICTURES (CASE 1)

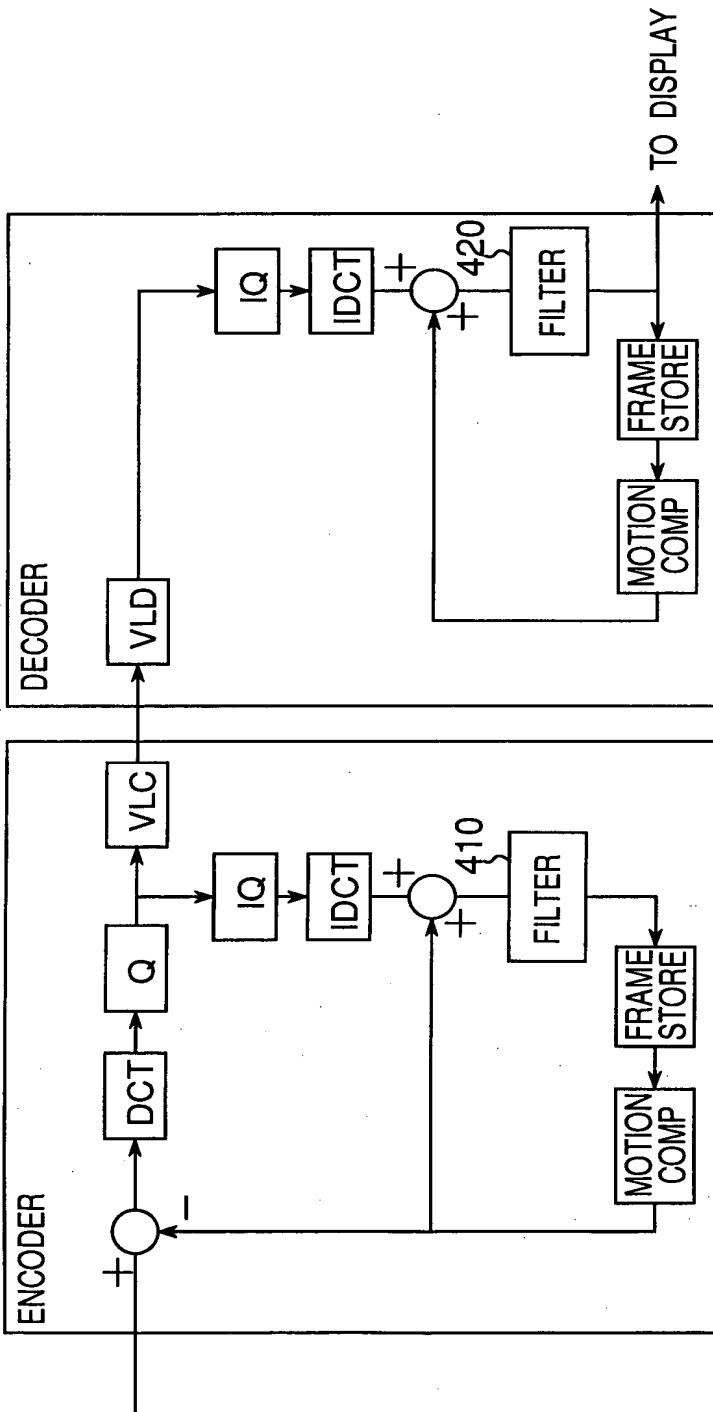


**LEGEND :**

- |             |  |        |                                     |
|-------------|--|--------|-------------------------------------|
| DCT         | - BLOCK BASED DISCRETE COSINE TRANSFORM      | VLD    | - VARIABLE LENGTH DECODING          |
| Q           | - QUANTIZATION                               | IQ     | - INVERSE QUANTIZATION              |
| VLC         | - VARIABLE LENGTH CODING                     | IDCT   | - INVERSE DISCRETE COSINE TRANSFORM |
| FRAME STORE | - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE | FILTER | - BLOCKY NOISE REMOVAL              |
| MOTION COMP | - MOTION COMPENSATION MODULE                 |        |                                     |

**Fig.4**

BLOCK DIAGRAM SHOWING THE LOCATION OF THE FILTER  
AS A LOOP FILTER FOR MOVING PICTURES (CASE 2)



**LEGEND :**

DCT - BLOCK BASED DISCRETE COSINE TRANSFORM

Q - QUANTIZATION

VLC - VARIABLE LENGTH CODING

FRAME STORE - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE

MOTION COMP - MOTION COMPENSATION MODULE

VLD

- VARIABLE LENGTH DECODING

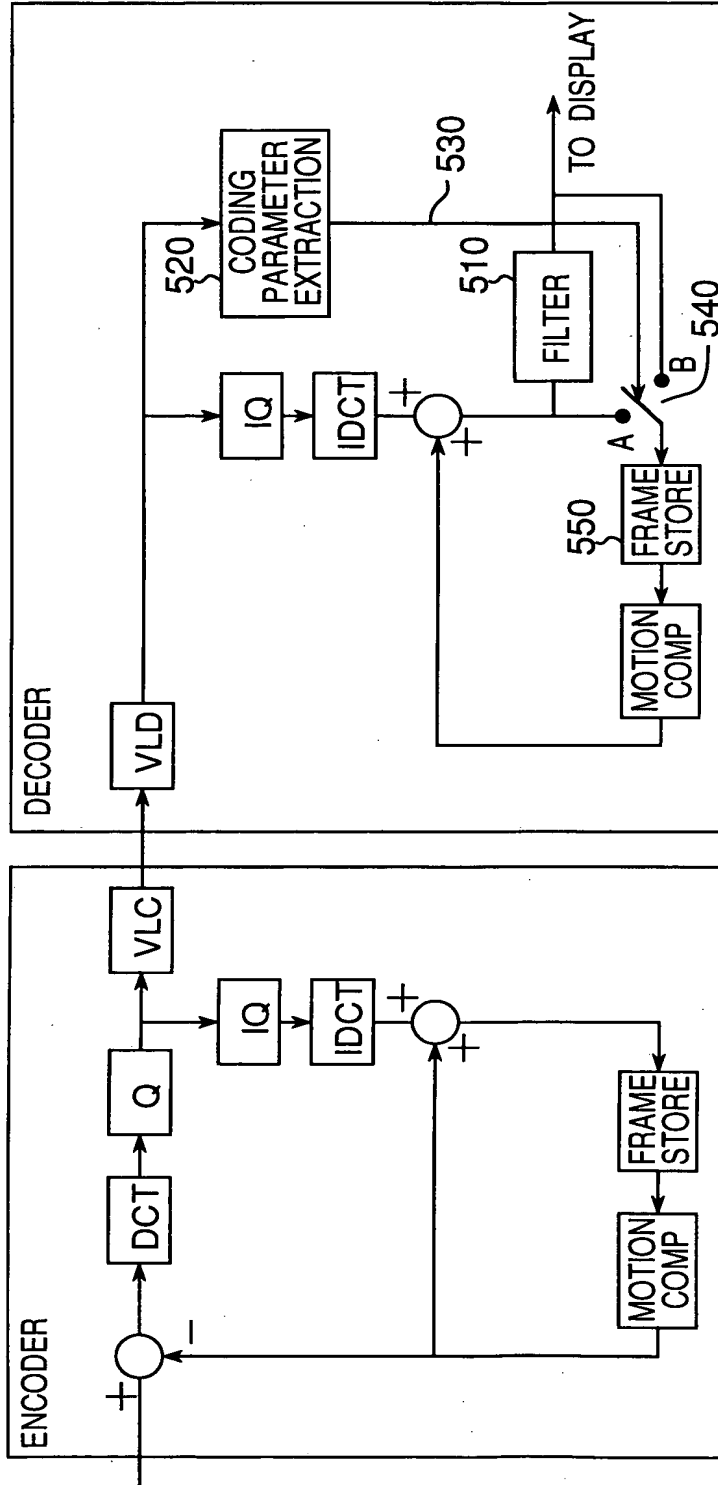
IQ - INVERSE QUANTIZATION

IDCT - INVERSE DISCRETE COSINE TRANSFORM

FILTER - BLOCKY NOISE REMOVAL

Fig.5

BLOCK DIAGRAM SHOWING THE CURRENT INVENTION WITH DYNAMIC SWITCHING OF THE LOOP FILTER



LEGEND:

DCT - BLOCK BASED DISCRETE COSINE TRANSFORM  
 Q - QUANTIZATION  
 VLC - VARIABLE LENGTH CODING  
 FRAME STORE - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE  
 MOTION COMP - MOTION COMPENSATION MODULE

VLD - VARIABLE LENGTH DECODING  
 IQ - INVERSE QUANTIZATION  
 IDCT - INVERSE DISCRETE COSINE TRANSFORM  
 FILTER - BLOCKY NOISE REMOVAL

Fig.6

FLOWCHART FOR TWO-STATE  
DYNAMIC SWITCHING DECISION

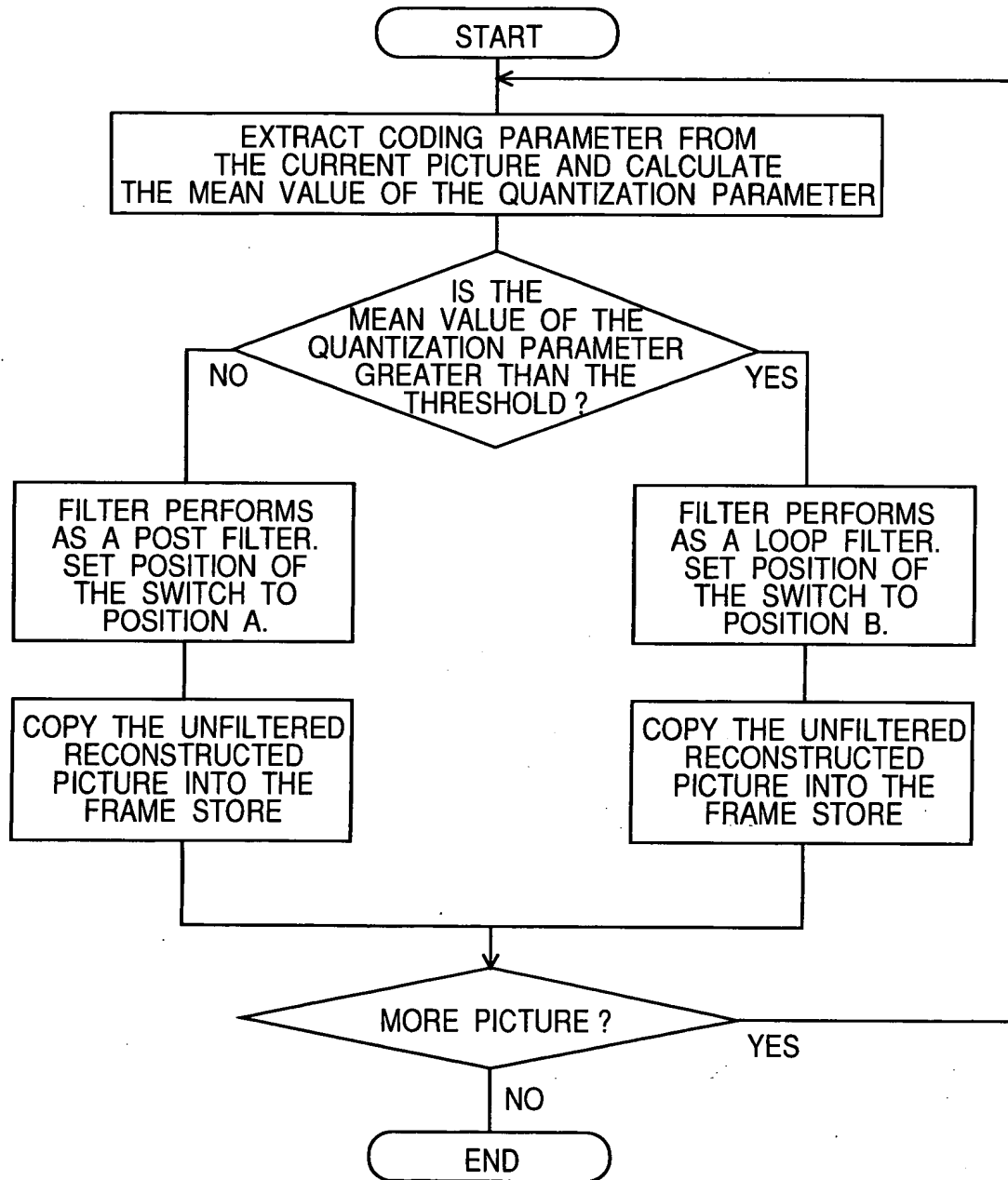








Fig.9

FLOWCHART FOR 3-STATE  
DYNAMIC SWITCHING DECISION

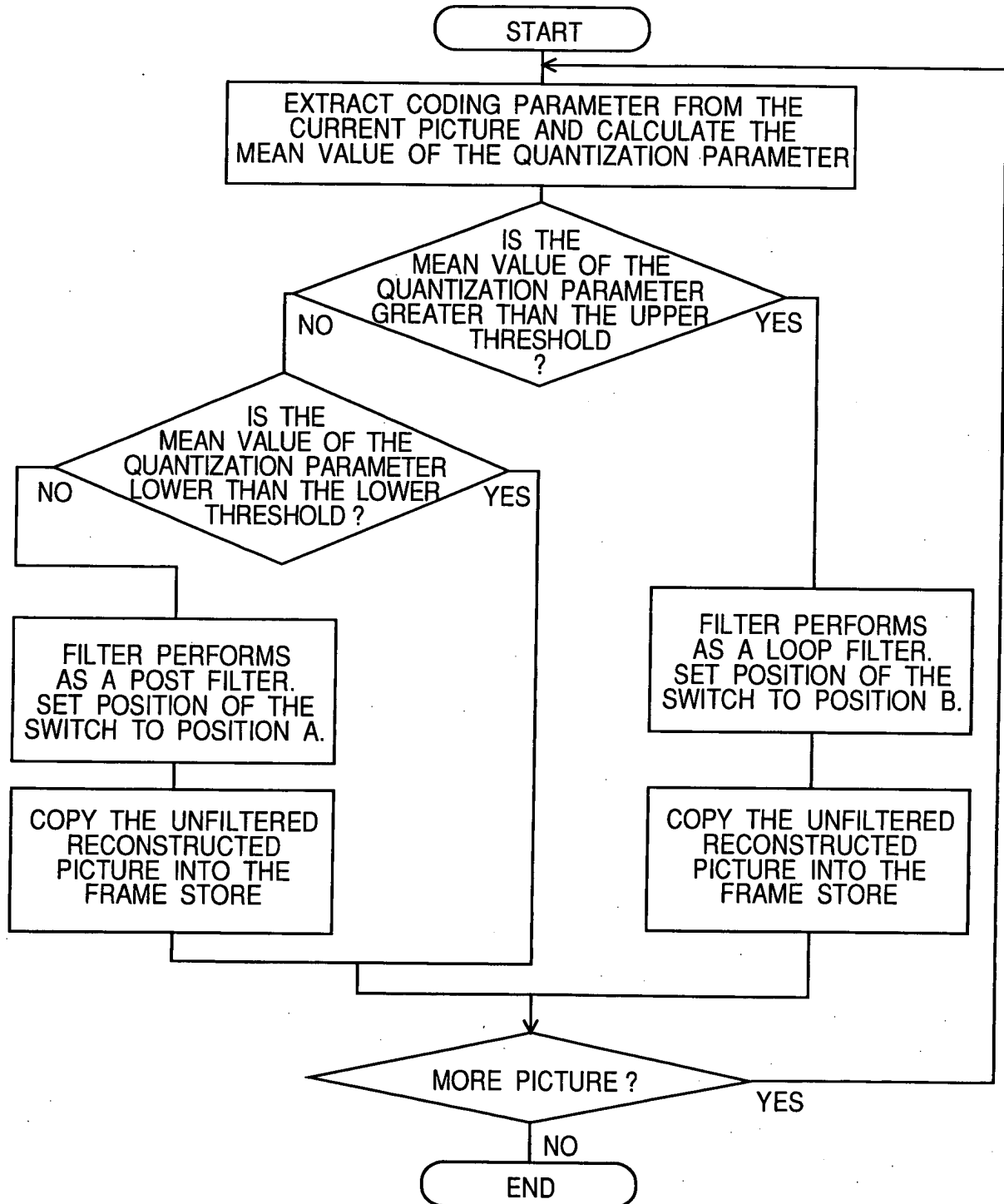


Fig.10

THE MOTION PREDICTION DIRECTION OF I-, P- AND B-PICTURES

